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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/714,658	11/16/2000	Mark D. Gehlsen	53786USA5B.012	5668

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EXAMINER

CHANG, VICTOR S

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 05/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/714,658

Applicant(s)

GEHLSSEN ET AL.

Examiner

Victor S Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26,29-32,34-36,43 and 47-60 is/are pending in the application.
- 4a) Of the above claim(s) 43,47,48 and 51-54 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26,29-32, 34-36,49,50 and 55-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Rejections not maintained are withdrawn.
3. Claims 57-60 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 57-60, lines 1-2 of each claim, the term "composition" should be something else, e.g., --a layer--, etc.

Election/Restrictions

4. Applicants' amendment filed 4/9/2003 necessitated that a new restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-26, 29-32, 34-36, 49, 50-53 and 55-60, drawn to a foam article comprises a matrix comprising a blend wherein said blend comprises a pressure sensitive adhesive, classified in class 428, subclass 343.
 - II. Newly amended claims 43, 47, 48 and 54, drawn to a foam article comprises a matrix comprising a blend wherein said blend comprises a pressure sensitive adhesive polymer that is a reaction product of monomers comprising an acrylate, methacrylate, or combinations thereof, classified in class 428, subclass 355AC.

The inventions are distinct, each from the other because of the following reasons:

5. Inventions Group I and Group II are related as combination and subcombination.

Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the omission of details of the claimed subcombination in Group I is evidence that the patentability of the combination does not rely on the details of the specific subcombination.

6. Because these inventions are distinct for the reasons given above and the search required for Group II is not required for Group I, restriction for examination purposes as indicated is proper.

7. Should Applicants elect the claims of Group I, the application further contains claims directed to the following patentably distinct species of the claimed invention: (A) a polymer foam matrix comprising a blend of a pressure sensitive adhesive polymer and one polymer selected from a group of polymers (see claim 19 for details); (B) a polymer foam matrix comprises an acrylic foam (see newly added claim 51 for details); (C) a polymer foam matrix comprises an acrylic foam and one polymer selected from a group of polymers (see newly added claim 52 for details); (D) a polymer foam matrix comprises an acrylic foam and polymer selected from a group of polymers (see newly added claim 53 for details).

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8. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, "a polymer foam matrix" is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

9. During a telephone conversation with Jean Lown on 5/5/2003 a provisional election was made with traverse to prosecute the invention of Group I and Species (A), claims 1-26, 29-32, 34-36, 49, 50 and 55-60. Affirmation of this election must be made

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by applicant in replying to this Office action. Claims 43, 47, 48 and 51-54 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Response to Amendment

10. Claims 1-6, 9-12, 17, 19-32 and 34-37, 49 and 50 and newly added claims 57-60 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hartman et al. (US 5476712), substantially for the reasons set forth in sections 3, 6 and 7 of Paper No. 8, together with the following additional observations.

With respect to Applicant's Response arguing that "the reference discloses that the core has a rough surface" (Response, page 6, last paragraph), the Examiner notes that Hartman expressly teaches that "the skin provides the carrier with a smooth face" (column 3, lines 18-19); additionally, the Examiner reiterates that in Fig. 1, Hartman illustrates that the surfaces of the foam article are parallel to the flat or smooth surfaces of the skin layers and adhesive layers (see page 2 of Paper No. 8), Applicants' argument to the contrary notwithstanding.

With respect to Applicants' argument that "a skin must be added to the core to provide a carrier with a smooth face" (Response, page 7, first paragraph), the Examiner notes that Hartman discloses the invention as claimed. The fact that it discloses additional structure not claimed is irrelevant.

Applicants' argument that claims 23 provides "the polymer foam is prepared by expanding most, if not all, of expandable microspheres that are to be expanded before the polymer composition exits the die" (Response, page 7, third paragraph), and "in contrast, US '712 teaches that substantially all of the expansion of the polymeric microspheres occurs just as the polymer begins to flow out of the opening of the die and the pressure applied to the polymer is reduced", as a result, the carrier of US '712 "does not have a uniform distribution of the expanded polymeric microspheres" (Response, page 7, fourth paragraph) is not found convincing. It is noted that in the Specification Applicants expressly stated that "even though the temperature within tubing 18 is sufficient to cause microsphere expansion, the relatively high pressure within the transfer tubing prevents the from expanding. Once the composition enters die 14, however, the pressure drops. The pressure drop, coupled with heat transfer from the die, causes the microspheres to expand and the composition to foam within the die..., the pressure in the die cavity remains sufficiently low to allow expansion of the expandable microspheres before the polymer composition reaches the exit opening of the die" (Specification, page17, lines 10-20). As such, the Examiner notes that the process for expanding the microspheres in the instant claimed invention is essentially the same as Hartman's teaching, and the expansion of the microspheres inherently occurs as the pressure applied to the polymer is reduced, which is the region near the opening of the die, Applicants' argument to the contrary notwithstanding.

With respect to newly amended claims 23, 24 and 26, it is believed that the uniform size distribution of the microspheres and the standard deviation of the density of

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the polymer foam are either inherently disclosed by Hartman, or an obvious optimization to one skilled in the art, since the process for expanding the microspheres in the instant claimed invention is essentially the same as Hartman's teaching as set forth above.

With respect to claim 50, the Examiner apologizes for the inadvertent typo which are correctly pointed out by the Applicants (Response, page 10, fourth complete paragraph). However, it is believed that Applicants fully understood the analysis set forth in the previous Office Action, and the inadvertent typos have caused no harm to the Applicants.

For claims 19, 49 and 50, the Examiner reiterates that it is believed that substituting Hartman's polymer matrix with a suitable melt extrudable polymer blend of adhesive polymer and thermoplastic elastomer is either inherently disclosed or within the skill of the art, as evidenced by Hartman's express teaching that the core layer is formed from selected thermoplastic elastomers such as A-B-A triblock copolymer (column 4, lines 65 to column 5, line 1), which is inherently a pressure sensitive adhesive; further, the thermoplastic elastomer may be blended with a thermoplastic film-forming polymer such as polyethylene (column 5, lines 47-55), which is inherently an acrylate monomer-insoluble semicrystalline polymer.

For claims 31-32 and 34-36, the Examiner reiterates that it is believed that selecting suitable molecular weight and consequently the related suitable shear viscosity (i.e., typically there is a proportional relation between molecular weight and shear viscosity) for appropriate polymer processing methods and improved mechanical strength of the polymers are believed to be either inherently disclosed, or an obvious

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optimization to one of ordinary skill in the art, motivated by the desire obtain optimal extrusion conditions.

For newly added claims 57-60, Hartman expressly teaches in Fig. 1 that adhesive layers 20 and 22 are joined at the outer sides of the tape (column 4, lines 1-2).

11. Claims 7-8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartman et al. (US 5476712) either individually, or in view of Plamthottam et al. (US. 5100728), substantially for the reasons set forth in section 4 of Paper No. 8, together with the following additional observations.

With respect to Applicants' argument that Plamthottam does not teach expandable polymeric microspheres (Response, page 9, first complete paragraph), the Examiner notes that Applicants argue the cited references individually. In response to Applicant's arguments, it is asserted that one cannot show non-obviousness by attacking references individually where the rejections are based on combinations of references.

12. Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartman et al. (US 5476712) either individually, or in view of Esmay et al. (US 4415615), substantially for the reasons set forth in section 5 of Paper No. 8, together with the following additional observations.

With respect to Applicants' argument that Esmay does not disclose the use of expandable polymeric microspheres (Response, page 10, first complete paragraph), the Examiner notes that Applicants again ignore the relied upon prior combination and argue the cited references individually.

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13. Newly added claims 55 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartman et al. (US 5476712) either individually, or in view of Sieverding (US 4833193), substantially for the reasons set forth in section 8 of Paper No. 8, together with the following additional observations.

The Examiner reiterates that it would have been obvious to one of ordinary skill in the art to use Sieverding's triblock copolymer blend as the polymer matrix of Hartman's foam articles, motivated by the desire to obtain stretch releasable and reusable foam adhesive article.

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S Chang whose telephone number is 703-605-4296. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

VSC
May 6, 2003

DANIEL ZIRKER
PRIMARY EXAMINER
GROUP ~~1900~~

1700

Daniel Zinker